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Residual Gases in High-Vacuum Systems

AN international symposium under the patronage of the Consiglio Nazionale delle Ricerche will be held September 23–25 at Como, Italy, on the subject of residual gases in electron tubes and related high-vacuum systems.

The technical sessions, which will be held in the building of the Provincial Administration of Como, will deal with the following main topics: (1) residual gases and final vacuum in transmitting tubes, television tubes, receiving tubes, and other high-vacuum systems such as accelerators; (2) method of measuring residual gases during the manufacture and life of tubes; (3) origin of residual gases, studies on the condition of internal surfaces of tubes and their gas adsorption and desorption, and effects caused by the surface alterations due to the gas adsorption; (4) influence of residual gases on tube and cathode life; (5) removal of gases during the production of electron tubes, including research on pumping systems and the influence of pumping methods on residual gases; (6) removal of gases during the production and life of the tubes including the getter in transmitting tubes, receiving tubes, and cathode-ray tubes, the nonflashing getters, and getter pumps; (7) getter activity for various gases and gas mixtures; and (8) techniques for measuring getter activity.

Communications may be delivered in Italian, German, French, or preferably in English, and the proceedings will be published. Summaries (about 40 typewritten lines) of proposed papers should be sent in English and in French to the Secretariat, c/o Società Italiana di Fisica, 50, Via Saldini, Milan, Italy, not later than August 31. Further information on the symposium as it becomes available may be obtained from the Secretariat.

Macromolecules

PHYSICAL behavior of macromolecular substances, macromolecular substances in solution, molecular processes and kinetics of polymerization reactions, the chemistry of organic and inorganic macromolecular substances, and the behavior of macromolecular natural substances are the topics to be covered at an international symposium to be held October 12–16 in Wiesbaden, Germany. The symposium will be under the auspices of the Commission on Macromolecules of the International Union of Pure and Applied Chemistry in collaboration with the International Unions of Pure and Applied Physics, Biological Sciences, and Crystallography.

The program provides for one plenary paper lasting approximately one hour and five main papers of 30–50 minutes each, to be presented during each morning session. The main papers will be delivered simultaneously in two separate sessions. Afternoon sessions will be devoted to discussions of these papers and also to discussions of short communications previously submitted and circulated in the form of preprints. The official languages of the meeting are English, French, and

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German. It is intended that the plenary and main papers and part of the discussions will be published in several special issues of *Makromolekulare Chemie*.

Preliminary application forms and further information are available from the chairman of the organizing committee, Dr. W. Mauss, Kalle & Co. AG, Rheingaustrasse 25, Wiesbaden-Biebrich, Germany.

Gaseous Electronics

COLLISIONS in Atomic Systems will be the theme of the Twelfth Annual Gaseous Electronics Conference, as well as the title of the keynote lecture to be presented by David R. Bates of Queen's University, Belfast. The conference will be held October 14-16 at the National Bureau of Standards in Washington, D. C., under the joint sponsorship of NBS and the American Physical Society Division of Electron Physics.

The Thursday program, consisting of consecutive rather than simultaneous sessions, will include both invited and contributed papers. The deadline for abstracts is August 29. Inquiries concerning the program and other conference arrangements should be directed to the conference secretary, Lewis M. Branscomb, Atomic Physics Section, National Bureau of Standards, Washington 25, D. C.

Semiconductors

BULK electronic, thermal, and physicochemical properties and details of preparation of elemental and compound semiconductors, as well as preparation and chemical and electronic properties of surfaces and junctions, will be discussed at the 1½-day Semiconductor Symposium to be held during the 1959 fall meeting of the Electrochemical Society to take place October 19-22 at the Deshler-Hilton Hotel, Columbus, Ohio. The deadline for titles and 75-word abstracts (in triplicate) of 10-minute, recent-news papers is August 31. The meeting will also feature a 2½-day symposium on "The Surface Chemistry of Metals and Semiconductors", which will consist of some 20 invited papers by investigators from the US and abroad. Both symposia will be scheduled so as to avoid overlapping sessions.

Further information on the meeting may be obtained from the program chairman, A. C. Beer, Battelle Memorial Institute, 505 King Avenue, Columbus 1, Ohio. The recent-news papers for the Semiconductor Symposium should also be sent to Dr. Beer.

Applied Spectroscopy

EMISSION and x-ray spectroscopy, mass spectroscopy, infrared and ultra-violet absorption, and gas chromatography will be discussed during the November 4-6 meeting of the Society for Applied Spectroscopy to be held at the Hotel New Yorker in New York City. There will also be an instrument exhibition in connection with the meeting. Titles and abstracts of contributed papers should be submitted before September 1 to the program chairman, Dr. M. F. Wilson, Air Reduction Corporation Research Laboratory, Murray Hill, N. J., from whom further information is available.